Gulf of Mexico Harmful Algal Bloom Bulletin

11 December 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 7, 2006

Conditions Report

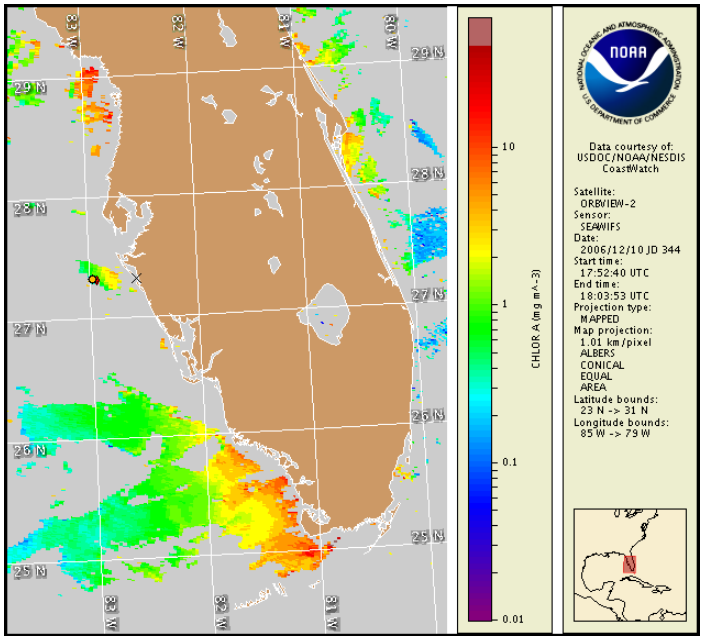
A harmful algal bloom has been identified from southern Pinellas to northern Lee Counties. Very low impacts are possible in northern Sarasota, southern Charlotte, and Lee Counties today through Thursday. No impacts are expected in any other county through Thursday.

Analysis

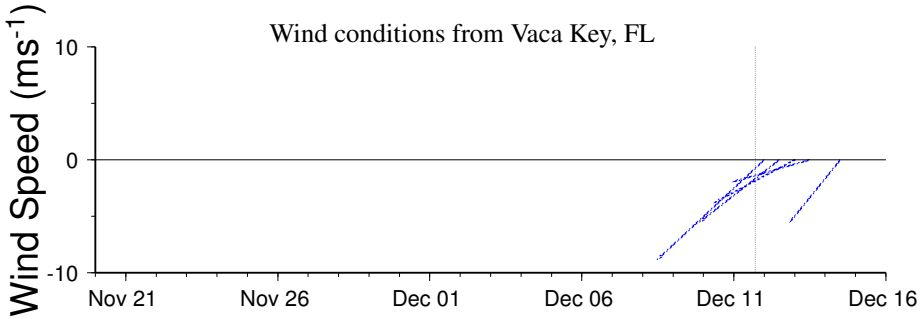
A harmful algal bloom remains in patches along southwest Florida, with concentrations primarily ranging from not present to very low along the coast. Recent imagery has been obscured by clouds and limits analysis. Generally, chlorophyll levels appear to have decreased since the last bulletin (>1-3 μg/L offshore; >5 μg/L nearshore at Collier County). Medium concentrations of *K.brevis* were reported at Gasparilla Pass in the Pine Island Sound region on 12/4 (FWRI). *K.brevis* has been detected in higher concentrations offshore of Sarasota, Charlotte, Lee, and Collier Counties. Consistent upwelling favorable, offshore winds may continue southwesterly transport and may increase intensity of the patchy, offshore bloom. Continued sampling is recommended. Offshore winds may minimize impacts at the coast except in the bay and sound regions where *K.brevis* continues to be identified.

Recent sampling data indicates that the bloom has potentially moved south toward the Florida Keys, with present to medium concentrations offshore of Cudjoe Key to Key West in Monroe County (12/4; MML). Strong northeasterly to easterly winds may promote southwesterly to westerly transport and minimize impacts at the coast.

~ Keller, Fenstermacher



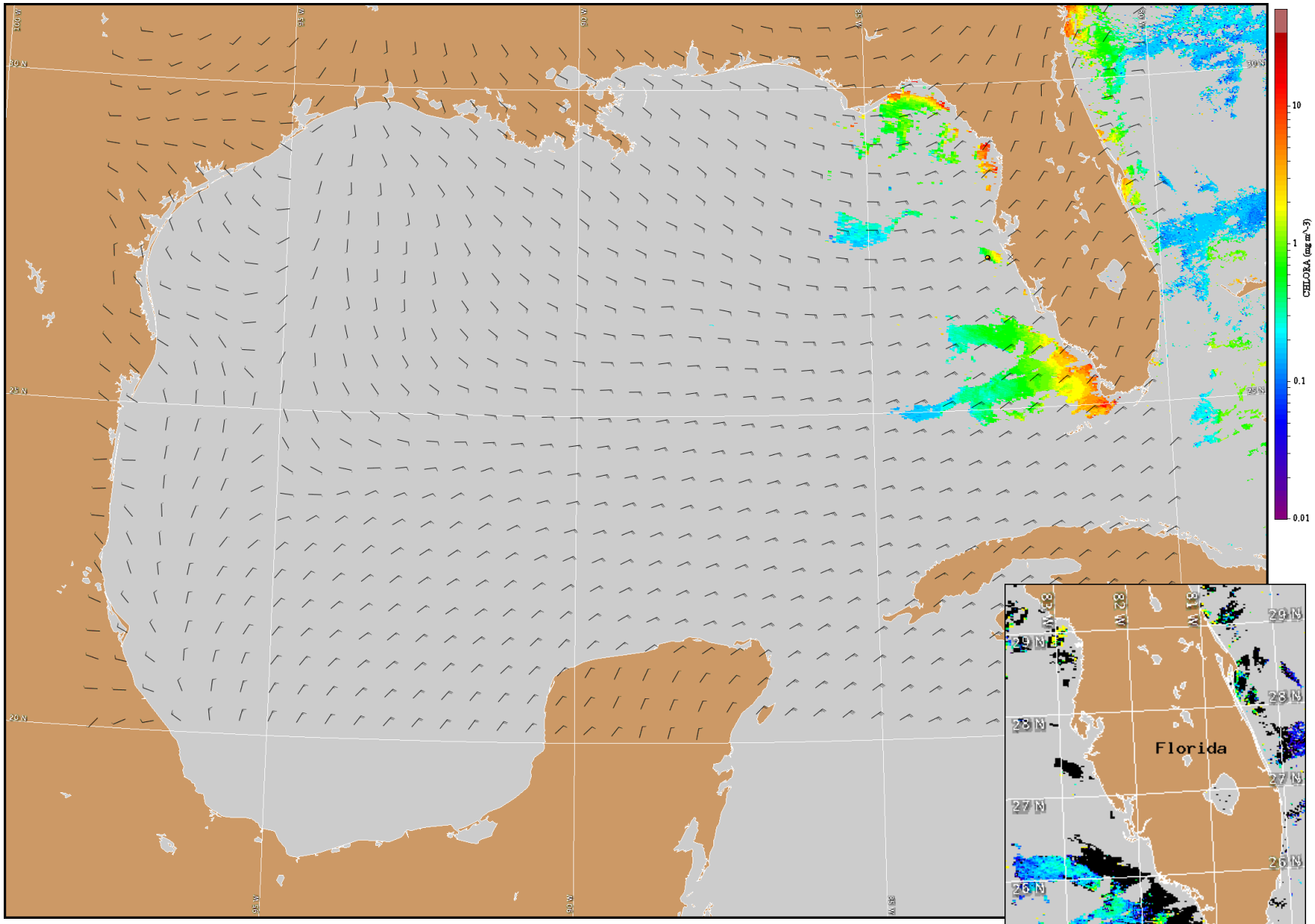
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration categories and corresponding cell count values from Florida Fish and Wildlife Research Institute. For a key to the cell concentration descriptions, visit http://research.myfwc.com.Cell concentration sampling data from December 1- 2 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Easterly winds today (10-15 knots; 5-8 m/s). Northeasterly winds on Tuesday (10 knots; 5 m/s), with easterly winds on Tuesday night (10 knots; 5 m/s). Northeasterly winds on Wednesday and Thursday (5-10 knots; 3-5 m/s).

Florida Keys: Northeasterly to easterly winds Monday through Friday (10-20 knots; 5-10 m/s).



Satellite chlorophyll image and forecast winds for December 12, 2006 12Z with cell concentration sampling data from December 1- 2 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Venice Pier, FL